

Mineral Industry Surveys

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ANTIMONY IN THE FOURTH QUARTER 2006

Consumption of primary antimony in the fourth quarter of 2006 was estimated by the U.S. Geological Survey to be 6% less than that in the third quarter of 2006 and about 2% higher than that in the fourth quarter of 2005. During the first 11 months of 2006, imports of all types of antimony totalled 27,300 metric tons (t), about the same as those in the comparable period of 2005. During the first 11 months of 2006, China was the leading supplier to the United States of antimony metal and antimony oxide.

The antimony price rose slightly during the fourth quarter. The Platts Metals Week New York dealer price for antimony metal started the fourth quarter in the range of \$2.48 to \$2.58 per pound and rose slightly, ending the fourth quarter at \$2.53 to \$2.58 per pound.

Industry sources report that antimony consumption in China has been at a record high. Strong domestic demand has limited exports, which are restricted by the Government. Antimony production in China rose 11% to 11,800 t in the first 9 months of 2006 compared with production in the similar period of 2005, even though antimony refiners have been complaining about reduced raw material sources. Exports of antimony from China declined by 31% during the first 9 months of 2006 compared with those of the similar period of 2005. Export figures, however, were suspect because large quantities of antimony were shipped out of China illegally (Ryan's Notes, 2006).

The Chinese Government has raised the minimum requirements for new upgraded projects in the antimony, tin, and the tungsten industries in a bid to curb future expansions.

The new requirements took effect January 1, 2007, and include higher standards for capacity, recycling of resources, power consumption, environmental protection, and product quality. According to the National Development and Reform Commission, the new standards are intended to ensure better use of the country's metal resources and to enhance the Government's supervision over these industries. For antimony, all smelting projects must have a capacity of 5,000 or more metric tons per year (t/yr) (Metal Bulletin, 2007).

The Chinese Government has ordered all illegal antimony mines and small smelters in Hunan Province to be closed for safety checks, after a fatal mine explosion in December. The affected smelters produce a total of 20,000 t/yr of antimony metal. The accident, reportedly caused by explosives, took place at the mine in Lengshuijiang City in central Hunan Province (Teo, 2006).

Update

On February 8, 2007, the Platts Metals Week price for antimony was \$2.56 to \$2.60 per pound.

References Cited

- Metal Bulletin, 2007, China to curb tungsten, antimony, and tin expansions: Metal Bulletin, no. 8978, January 15, p. 15.
Ryan's Notes, 2006, Minor metals: Ryan's Notes, v. 12, no. 50, December 18, p. 7.
Teo, Vivian, 2006, China cracks down on Hunan antimony producers: Metal Bulletin, no. 8975, December 18, p. 16.

TABLE 1
SALIENT ANTIMONY STATISTICS¹

(Metric tons, antimony content, unless otherwise specified)

	2005	2006 ^p				Total
		First quarter	Second quarter	Third quarter	Fourth quarter	
Production:						
Primary smelter ²	--	--	--	--	--	--
Secondary	3,670	W	W	W	W	W
Imports for consumption:	29,200	7,990	8,040	6,800 ^r	4,460 ³	27,300 ⁴
Ore and concentrate	204	10	46	51 ^r	23 ³	131 ⁴
Metal	6,370	1,780	1,620	1,800 ^r	1,250 ³	6,440 ⁴
Oxide ⁵	22,700	6,200	6,370	4,950 ^r	3,200 ³	20,700 ⁴
Exports:	2,420	507	601	583 ^r	611 ³	2,300 ⁴
Metal, alloys, and scrap (gross weight)	740	97	151	91 ^r	113 ³	452 ⁴
Oxide ⁵	1,680	409	451	492 ^r	498 ³	1,850 ⁴
Consumption of primary antimony	8,910 ^r	2,370 ^r	2,240 ^r	2,540 ^r	2,390	9,540
Price: Average cents per pound ⁶	160.46	199.25	251.23	249.77	251.77	238.01
Stocks, end of period ⁷	XX	2,210 ^r	2,350 ^r	2,010 ^r	1,880	XX

^pPreliminary. ^rRevised. W Withheld to avoid disclosing company proprietary data. XX Not applicable. -- Zero.

¹Data are rounded to no more than three significant digits, except prices.

²Nearly all primary smelter output is antimony trioxide.

³Data for October and November only; December data were not available at time of publication.

⁴Data for January - November only; December data were not available at time of publication.

⁵Antimony content is calculated by the U.S. Geological Survey.

⁶Source: Platts Metals Week. New York dealer price for 99.5% to 99.6% metal, c.i.f. U.S. ports.

⁷Producer and consumer stocks.

TABLE 2
INDUSTRY STOCKS OF PRIMARY ANTIMONY IN THE UNITED STATES¹

(Metric tons, antimony content)

Class of material	2006 ^{p, 2}			
	First quarter ^r	Second quarter ^r	Third quarter ^r	Fourth quarter
Oxide	1,800	1,940	1,580	1,450
Other ³	416	411	435	423
Total	2,210	2,350	2,010	1,880

^pPreliminary. ^rRevised.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Estimated 100% coverage based on quarterly respondents and respondents who held 47% of the total stocks of antimony at the end of 2005.

³Includes ore and concentrate, sulfide, and residues.

TABLE 3
CONSUMPTION OF PRIMARY ANTIMONY¹

(Metric tons, antimony content)

Class of material consumed	2005 ^r	2006 ^{p, 2}				Total
		First quarter ^r	Second quarter ^r	Third quarter ^r	Fourth quarter	
Oxide	7,300	1,800	1,670	1,980	1,900	7,350
Other ³	1,610	569	568	568	487	2,190
Total	8,910	2,370	2,240	2,540	2,390	9,540

^pPreliminary. ^rRevised.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Estimated 100% coverage based on quarterly respondents and respondents who consumed 70% of the total antimony in 2005.

³Includes ores and concentrates, metal, sulfide, and residues.

TABLE 4
CONSUMPTION OF PRIMARY ANTIMONY, BY CLASS OF MATERIAL PRODUCED¹

(Metric tons, antimony content)

Product	2005 ^r	2006 ^p				Total
		First quarter	Second quarter	Third quarter	Fourth quarter	
Metal ²	W	W	W	W	W	W
Nonmetal ³	W	W	W	W	W	W
Flame-retardants:						
Plastics	2,670	94	96	161 ^r	139	490
Other ⁴	951	157	133	157 ^r	113	559
Total	3,620	251	229	318 ^r	252	1,050
Reported consumption	8,910	739	700	768 ^r	712	2,920
Total consumption ⁵	XX	2,370 ^r	2,240 ^r	2,540 ^r	2,390	9,540

^pPreliminary. ^rRevised. W Withheld to avoid disclosing company proprietary data; included with "Reported consumption." XX Not applicable.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes adhesives, pigments, rubber, and textiles.

³Includes ammunition, antimonial lead, bearing metals and bearings, cable coverings, castings, sheet and pipe, and solder.

⁴Includes ammunition primers, pigments, ceramics and glass, and plastics.

⁵Estimated 100% coverage based on quarterly respondents and respondents who consumed 70% of the total antimony in 2005.

TABLE 5
U.S. IMPORTS FOR CONSUMPTION OF ANTIMONY, BY CLASS AND COUNTRY¹

(Metric tons, antimony content)

Class and country	2005	2006					
		January- June	September	Third quarter ²	October	November	January- November ²
Ore and concentrate:							
China	147	20	--	--	--	--	20
Other	57	37	28	51	--	23	111
Total	204	57	28	51	--	23	131
Metal:							
China	3,870	2,170	378	1,250	498	516	4,430
Mexico	900	486	101	144	55	36	721
Peru	461	497	38	186	54	54	791
Other	1,140	242	--	215	11	21	489
Total	6,370	3,390	516	1,800	618	627	6,440
Oxide: ³							
Belgium	1,550	866	118	310	212	118	1,510
China	9,510	5,480	572	2,140	931	558	9,110
Hong Kong	146	--	--	17	--	--	17
Mexico	9,930	134	814	2,390	773	586	8,220
Other	1,530	6,090	9	104	11	7	1,870
Total	22,700	12,600	1,510	4,950	1,930	1,270	20,700
Grand total	29,200	16,000	2,060	6,800	2,550	1,920	27,300
Other antimony compounds (gross weight)	53	23	--	12	13	--	47

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²May include revisions to prior months data.

³Antimony content is calculated by the U.S. Geological Survey.

Source: U.S. Census Bureau.